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(56) Documents Cited by ISA

US 6012523 A US 5901789 A

US 5718288 A US 5667011 A

US 5337823 A US 3477506 A

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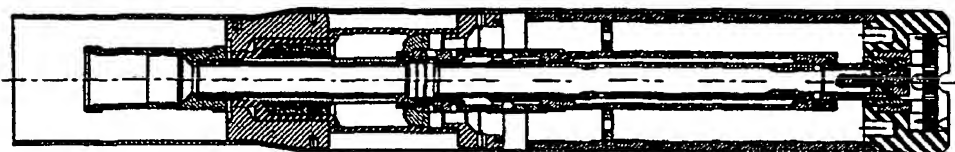
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(54) Abstract Title

Liner hanger with sliding sleeve valve

(57) An apparatus and method for forming or repairing a wellbore casing, a pipeline, or a structural support is disclosed. An expandable tubular member (20a) is radially expanded and plastically deformed by an expansion cone (18) that is displaced by hydraulic pressure. Before or after the radial expansion of the expandable tubular member (20a), sliding sleeve valve (42) within the apparatus permit a hardenable fluidic sealing material to be injected into an annulus between the expandable tubular member (20a) and a preexisting structure.

10



GB 2 387 861 A

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